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09/234,695	01/21/1999	ANDRE-ROGER HENRY DELLEVI		5728

7590 12/01/2003	EXAMINER
IVAR M KAARDAL	VAN DOREN, BETH
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ART UNIT	PAPER NUMBER
3623	

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DATE MAILED: 12/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _10/21/03_.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _17_ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _17_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.　　A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 10/26/03 has been entered.

2.　　The following is a non-final office action in response to the request for continued

examination received on 10/26/03. Claims 1-16 have been cancelled. Claim 17 has been

amended. Claim 17 is now pending in this Application.

Response to Amendment

3.　　Applicant's cancellation of claim 13 is sufficient to overcome the claim objections set

forth in the previous office action.

Claim Rejections - 35 USC § 112

4.　　The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

5.　　The steps of claim 17 state "establishing [...] a preliminary schedule...", "making [...] a

conditional offer...", "displaying to other employees...", "checking [...] training qualifications

data", etc. It is not clear, based on the language of these steps and the other recited steps, as to

who or what is implementing or carrying out each of the limitations. For example, a person

could be establishing the preliminary schedule by hand and displaying to other employees, both

steps could be occurring via a computer medium, or a person could be doing one and a computer

could be performing the other. Therefore, it is not clear as to what is distinctly being claimed as

the steps of the invention. For purposes of examination, the steps have been construed as being

carried out in a computer readable medium. Clarification is required in response to this office

action.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   Claim 17 ia rejected under 35 U.S.C. 103(a) as being unpatentable over "Visual Rota

from CDT" (ww.btinternet.com/~vrota) in view of Fields et al. (U.S. 5,111,391)

8.   As per claim 17, "Visual Rota from CDT" teaches a computer-implemented method for

processing signals related to trading shifts between employees, the method comprising:

establishing, by management of an organization, a preliminary schedule of shifts of a

plurality of employees of the organization (See page 1, page 2, section 2, page 3, sections 1 and

2, and page 4, wherein a preliminary shift schedule is established by the boss of an organization

for the plurality of his/her employees);

making, after the establishment of the preliminary schedule of shifts by the management

of the organization, a conditional offer, by a first employee of the plurality of employees who is

assigned to work a first shift of a first job type, to trade the first shift for another shift of another employee of the plurality of employees (See page 2, section 2, and page 3, section 1, wherein a first employee of a first shift of a first job type (Monday, "earlies") makes a conditional offer to swap the shift with another employee);

presenting to other employees of the plurality of employees the conditional offer to trade the first shift for another shift (See page 3, section 1, wherein the employees trade shifts amongst themselves);

receiving a conditional acceptance from a second employee to trade a second shift of a second type of job assigned to the second employee for the offered first shift of the first employee (See page 2, section 2, and page 3, section 1, wherein a second employee of a second shift of a second job type (Monday, "lates") conditionally accepts the swap with the first employee);

checking, after the second employee has submitted the conditional acceptance, the rules data for the swap between the first and second employees (See page 3, section 1, wherein certain rules must be complied with to make the swap official);

rejecting a trade of the first shift of the first employee for the second shift of the second employee if the rules data of the second employee does not meet the predetermined minimum rules requirements for the swap or if the rules data of the first employee does not meet the predetermined minimum rules requirements for the second type of job (See page 3, section 1, wherein certain rules must be complied with to make the swap official);

confirming the trade of the first shift of the first employee for the second shift of the

second employee upon verification of criteria if the trade has not been rejected (See page 3,

section 1, wherein the system can swap the shifts);

wherein the step of confirming includes checking the time of occurrence of the first shift

and the second shift against a minimum time rule for trading shifts (See page 3, section 1);

additionally including indicating to the first employee, upon confirmation of the trade, the

confirmation of the trade (See page 3, section 1, and page 4, wherein the employees can swap

shifts as per the rules and the schedule is maintained in the system and viewable); and

additionally including the system containing information about the trade of the first shift

for the second shift upon confirmation of the trade (See page 3, section 1, and page 4, wherein

the employees can swap shifts as per the rules and the schedule is maintained in the system and

viewable).

However, "Visual Rota from CDT" does not expressly disclose:

a first employee of a plurality of employees who is assigned to work a first shift of a first

type of job, the type of job having predetermined minimum training requirements required of

employees qualified to perform the first type of job, the predetermined minimum training

requirements for each type of job being stored in a training requirements database, training

qualifications for each employee of the plurality of employees being stored in a training

qualifications database;

a second employee of a plurality of employees who is assigned to work a second shift of

a second type of job, the type of job having predetermined minimum training requirements

required of employees qualified to perform the second type of job;

displaying to other employees the conditional offer to trade shifts;

checking training qualifications data for the first and second employees stored in a training qualifications database;

comparing the training qualifications data for the second employee against the predetermined minimum training requirements for the first type of job of the first shift;

comparing the training qualifications data for the first employees against a predetermined minimum training requirements for the second type of job of the second shift;

rejecting the trade of the first shift to a second employee or the second shift to the first employee if the training qualifications data if the training qualifications of either employee does not meet the predetermined minimum training requirements for each job;

wherein the step of confirming including checking a length of time between a time of receipt of the conditional acceptance and a time of occurrence of the first shift and the second shift against a minimum time period for trading shifts to verify that the length of time is not less than the minimum period;

displaying to the second employee, upon assignment of a shift, notifications relevant to a work area function associated with the first type of job and training data associated with the second employee; or

additionally including restricting access to information about the trade of the first shift for the second shift upon confirmation of the trade.

Fields et al. discloses:

establishing, by management of an organization, a preliminary schedule of shifts of a

plurality of employees of the organization (See at least column 1, lines 64-67, column 2, lines 1-

10 and 15-35, column 4, lines 35-40 and 50-61, column 5, lines 15-35, column 6, lines 15-37 and

43-60, wherein a preliminary schedule with shifts is established using the plurality of employees

of the organization. This schedule can be edited later);

a first employee of a plurality of employees who is assigned to work a first shift of a first

type of job, the type of job having predetermined minimum training requirements required of

employees qualified to perform the first type of job, the predetermined minimum training

requirements for each type of job being stored in a training requirements database, training

qualifications for each employee of the plurality of employees being stored in a training

qualifications database (See at least column 1, lines 64-67, column 2, lines 1-10 and 15-35,

column 4, lines 35-40 and 50-61, column 5, lines 15-35, column 6, lines 15-37 and 43-60,

wherein a first employee is assigned to work a first shift that is a specific job type with specific

requirements, such as training. Databases exist in the system that store employee qualifications

and job type requirements for the shifts of the schedule assigned the employees);

a second employee of a plurality of employees who is assigned to work a second shift of

a second type of job, the type of job having predetermined minimum training requirements

required of employees qualified to perform the second type of job (See at least column 1, lines

64-67, column 2, lines 1-10 and 15-35, column 4, lines 35-40 and 50-61, column 5, lines 15-35,

column 6, lines 15-37 and 43-60, wherein a first employee is assigned to work a second shift that

is a specific job type with specific requirements, such as training);

displaying to other employees of the plurality of employees the first shift and the shifts (See at least figure 3, column 1, lines 64-67, column 2, lines 1-10 and 15-35, column 4, lines 35-40 and 50-61, column 5, lines 15-35, column 6, lines 15-37 and 43-60, wherein the schedule of shifts is viewable);

editing the schedule and performing maintenance on the schedule after it is created (See at least column 3, lines 25-40, column 5, lines 15-35 and 50-65, column 6, lines 15-37 and 43-60, wherein the schedule is altered, employees are moved, and maintenance occurs);

checking training qualifications data for the first and second employees stored in the training qualifications database (See at least figures 2 and 4B, column 1, lines 64-67, column 2, lines 1-10 and 15-35, column 4, lines 35-40 and 50-61, column 5, lines 15-35, column 6, lines 15-37 and 43-60, wherein training qualification data for employees are checked against the minimum training data required for the schedule shifts);

comparing the training qualifications data for the second employee against the predetermined minimum training requirements for the first type of job of the first shift (See at least figures 2 and 4B, column 1, lines 64-67, column 2, lines 1-10 and 15-35, column 4, lines 35-40 and 50-61, column 5, lines 15-35, column 6, lines 15-37 and 43-60, wherein training qualification data for an employee is checked against the minimum training data required for the scheduled shift);

comparing the training qualifications data for the first employees against a predetermined minimum training requirements for the second type of job of the second shift (See at least figures 2 and 4B, column 1, lines 64-67, column 2, lines 1-10 and 15-35, column 4, lines 35-40 and 50-

61, column 5, lines 15-35, column 6, lines 15-37 and 43-60, wherein training qualification data

for an employee is checked against the minimum training data required for the scheduled shift);

rejecting assignment of the first shift to a second employee if the training qualifications

data of the second employee does not meet the predetermined minimum training requirements

for the first type of job or rejecting assignment of the second shift to the first employee if the

training qualifications data of the first employee does not meet the predetermined minimum

training requirements for the second type of job (See at least figures 2 and 4B, column 1, lines

64-67, column 2, lines 1-10 and 15-35, column 4, lines 35-40 and 50-61, column 5, lines 15-35,

column 6, lines 15-37 and 43-60, wherein training qualification data for employees are checked

against the minimum training data required for the schedule shifts and the employee must have

this minimum training in order to be assigned to the job);

displaying to the second employee, upon assignment of a shift, notifications relevant to a

work area function associated with the first type of job and training data associated with the

second employee (See at least figures 3, 4A, and 4B, column 6, lines 15-32, and column 8, lines

1-36, wherein the shift information is viewable to a worker assigned the shift);

additionally including indicating to the first employee assignment of a shift (See at least

figures 3, 4A, and 4B, column 6, lines 15-32, and column 8, lines 1-36,, wherein the schedule

and assignments are viewable)

additionally including restricting access to information of the system (See at least column

1, lines 65-67, column 2, lines 1-10, and column 7, lines 1-8 and 33-36, column 8, lines 1-10 and

25-36, wherein operators have access to the system to generate the schedules).

However, Fields et al. also does not expressly disclose checking a length of time between

a time of receipt of the conditional acceptance and a time of occurrence of the first shift and the

second shift against a minimum time period for trading shifts to verify that the length of time is

not less than the minimum period.

Fields et al. teaches a computer-implemented tool that creates schedules with shifts as a

function of skill qualification rules for the allowable assignment of shifts, allows employees to

work shifts for which they meet the minimum criteria, and allows for the editing and

maintenance of this schedule. See at least figure 3, which shows the distinction between

different job types with different minimum skills requirements. "Visual Rota from CDT"

discloses a computer-implemented tool that creates schedules for employees based on

information stored about the employees (preferences on days off, availability, etc.) and allows

employees to switch shifts based on qualification rules about swapping. Therefore, the

employees of "Visual Rota from CDT" are all considered capable of the jobs of the other

employees by the system that maintains the schedule. Swapping shifts within skill levels is well

known in the work force, such as waitress A covering a shift of waitress B so waitress B picks up

a shift of waitress A in return. Examiner points out that it well known that waitress A and the

chef would never swap shifts in the work force, and, instead, another chef would swap with the

chef. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to include the skill qualification rules for the allowable assignment of shifts of Fields et

al. in the qualification rules for the allowable swapping and assignment of shifts of "Visual Rota

from CDT" in order to increase the cost effectiveness of assigning shifts by assuring that a

making sure the tasks requiring the highest amount of skill are assigned the highest level

employees, as discussed in column 5, lines 60-67, and column 6, lines 1-5, of Fields et al. Back

to the waitress/chef example, it is obvious to one of ordinary skill in the art at the time of the

invention that the company would lose money if the waitress and the chef swapped positions.

Furthermore, "Visual Rota from CDT" discloses rules about trading shifts and Fields et

al. discloses rules about shift assignment. It is old and well known that places of employment

require that employees give notice by a specific deadline in order to do things such as take leave,

quit, swap shifts, etc. For example, in order for an employee to withdraw from employment with

a business, he or she must give notice a specific length of time before quitting so that the

business can find someone to fill said employee's responsibilities before said employee leaves.

It would have been obvious to one of ordinary skill in the art at the time of the invention to

include in the swap rules of "Visual Rota from CDT" a requirement of a specific length of time

between the shift swap and the shift in order to increase the efficiency of the schedule and the

timeliness of the company by making sure that all areas involved are appropriately staffed.

"Visual Rota from CDT" discusses that finding people to definitively work the assigned shifts

reduces problems, as stated on page 3, section 3.

Response to Arguments

9.   Applicant's arguments with regards to the rejections based on Donnelly et al. (U.S.

6,192,346) have been considered but are moot in view of the new grounds of rejection set forth

above, as necessitated by amendment.

10.   Applicant's arguments with regard to the rejections based on "Visual Rota from CDT"

(ww.btinternet.com/~vrota) have been fully considered, but they are not persuasive. In the

remarks, Applicant argues that "Visual Rota from CDT" (1) does not teach or suggest making

distinctions between the types of jobs, qualifications, or skills when swapping shifts, (2) does not

teach or suggest checking a minimum time period before the shift to be swapped, (3) suggests

few restrictions on swapping shifts and that balancing is the primary restriction on any swap, (4)

suggests to one of ordinary skill in the art that events such as sickness and "leaving" can be

predicted "statistically" and thus compensated for, and therefore shift altering can be predicted

rather than arranged for more than a minimum period of time before the swap (5) does not

suggest that "it is old and well known that places of employment require that employees give

notice by a specific deadline in order to do things such as take leave, quit, swap shifts, etc." and

Applicant has made arguments concerning (6) the statement "For example, in order for an

employee to withdraw from employment with a business, he or she must give notice a specific

length of time before quitting so that the business can find someone to fill said employee's

responsibilities before said employee leaves".

In response to arguments (1) of the Applicant, Examiner reminds the Applicant that

rejections set forth above and in the previous office action are 35 U.S.C. § 103 rejections

wherein a secondary reference, and not "Visual Rota from CDT", is relied upon to specifically

teach the limitations concerning distinctions between the types of jobs, qualifications, or skills

when allowing an employee to be assigned a shift. "Visual Rota from CDT" is relied upon to

teach the swapping of shifts based on rules. See page 3, section 1.

In response to argument (2) of the Applicant, Examiner agrees with the Applicant.

Examiner has asserted above and in previous office actions that the limitation concerning

checking for a minimum time period before the shift to be swapped would be obvious to one of

ordinary skill in the art at the time of the invention. Examiner points out that it would be obvious

to one of ordinary skill in the art at the time of the invention that the swap has to occur before the

shift occurs. Examiner also points out that (a) it would be obvious to one of ordinary skill in the

art at the time of the invention that the shift assignments of Fields et al. also occur before the

start of the shifts and (2) "Visual Rota from CDT" discusses the swap in future terms in at least

page 3, section 1.

In response to argument (3) of the Applicant, Examiner points out that in the 35 U.S.C. §

103 rejections set forth above "Visual Rota from CDT" is relied upon to teach the swapping of

shifts based on rules. See page 3, section 1. Therefore, the "few restrictions" satisfy this

assertion. The secondary reference of Fields et al. (U.S. 5,111,391) was relied upon to

specifically teach the limitations concerning restrictions and distinctions between the types of

jobs, qualifications, or skills when allowing an employee to be assigned a shift.

In response to argument (4) of the Applicant, Examiner respectfully disagrees and points

out that "Visual Rota from CDT" states "Once you have everyone's shifts for a year, you can

count up the hours to ensure that they are evenly distributed, make adjustments using the above

rules [for swapping], and there you are, 40+ staff, scheduled for a year ahead. As long as

everyone works these shifts, then there are no problems, however, human nature and health do

need to be handled correctly. Sickness is one problem that tends to be statistically cyclical, staff

leaving is also predictable. These and many other variables can be factored into the statistics".

This statement of "Visual Rota from CDT" teaches two things – i. that you can schedule shifts

for a year period and allow the employees to swap assigned shifts to create a firm schedule and

ii-your schedule for the year will succeed if everyone works the assigned shifts. Sickness,

quitting, etc. are reasons for the employees not to work their shifts, but since these factors are predictable they can be accounted for in "the statistics". Since it was termed the statistics, it is clear that this second idea is referring to the building of the initial schedule and not the swapping done by the assigned employees to that schedule. Therefore, since these are two distinct ideas and since "Visual Rota from CDT" does not recite, teach, or suggest that shift swapping is predictable or specific employees getting sick, leaving, etc. (but merely that sickness and the factors can be predicted over the work force), Examiner respectfully disagrees with the Applicant's assertion.

In response to argument (5) of the Applicant, Examiner points out that Examiner used the statement "it is old and well known that places of employment require that employees give notice by a specific deadline in order to do things such as take leave, quit, swap shifts, etc." as an example of the time sensitivity of certain actions in the work place. Examiner never stated that "Visual Rota from CDT" expressly taught this assertion, but rather that it was old and well known to one of ordinary skill in the art at the time of the invention in light of the teachings of the prior art.

In response to Applicant's arguments concerning (6), Examiner points to her response with regards to argument (5) and again states that this is an example of the time sensitivity of certain actions in the work place.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Furukawa et al. (U.S. 6,594,637) discloses generating a schedule for a plurality of users and managing this schedule.

Liddle ("People-The Single Point of Difference") teaches shift swapping amongst employees.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is (703) 305-3882. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

bvd
November 19, 2003

Susanna Diaz
Primary Examiner
A.U. 3623